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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,365	02/12/2004	Christopher A. Meek	MS306756.1 / MSFTP557US	5091
27195	7590	09/06/2006	EXAMINER KIM, PAUL	
AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			ART UNIT 2161	PAPER NUMBER

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/777,365

Applicant(s)

MEEK ET AL.

Examiner

Paul Kim

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 10-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SAM RIMELL**  
**PRIMARY EXAMINER**

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/14/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office action is responsive to the following communication: Reply to Restriction Requirement filed on 25 August 2006.
2. Claims 1-9 are pending and present for examination. Claims 10-37 are Non-Elected.

#### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 14 June 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Drawings***

4. The drawings were received on 7 February 2005. These drawings are accepted.

#### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 1-9** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed toward "a system that facilitates web-crawling," and are non-statutory because they do not encompass tangible subject matter and/or embodiments which fall within a statutory category.

Specifically, the claims are not directed to the performance or execution of a process which allows for a tangible result. See *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02. MPEP 2106. "The claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result' " (emphasis added).

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7. **Claims 3-4** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed toward a formula, specifically the Maximum Expected Utility Principal, which fails to fall within a statutory category or a judicial exception.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1-2 and 5-9** are rejected under 35 U.S.C. 102(e) as being anticipated by Squillante et al (USPGPUB 2004/0225644, hereinafter referred to as SQUILLANTE), filed on 9 May 2003, and issued on 11 November 2004.

10. **As per independent claim 1**, SQUILLANTE teaches:

A system that facilitates web-crawling comprising:

a managing component that performs a predictive analysis in connection with determining if, when, and how to perform web-crawling {See SQUILLANTE, [0029], wherein this reads over "[a] crawler optimizer determines an optimal number of crawls for each Web page over a fixed period of time called a scheduling interval, as well as determining the theoretically optimal (ideal) crawl times themselves"}; and

a web-crawling component that crawls subsets of web pages as a function of the predictive analysis {See SQUILLANTE, [0006], wherein this reads over "[a] crawler visits Web pages on various Web sites"}.

11. **As per dependent claim 2**, SQUILLANTE teaches:

The system of claim 1, further comprising a decision-theoretic component that makes predictions regarding changes in at least one web page to determine an appropriate time to crawl the at least one web page {See SQUILLANTE, [0081]-[0087], wherein this reads over "to optimally schedule the current scheduling interval using some information from the last one"}.

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**12. As per dependent claim 5, SQUILLANTE teaches:**

The system of claim 1, the predictive analysis is based at least in part on the utility of the at least one web page {See SQUILLANTE, [0040], wherein this reads over "the weights  $w_i$  will determine the relative importance of each Web page  $i$ ."}.

**13. As per dependent claim 6, SQUILLANTE teaches:**

The system of claim 1, the predictive analysis is based at least in part on historical data related to the at least one web page {See SQUILLANTE, [0081]-[0087], wherein this reads over "to optimally schedule the current scheduling interval using some information from the last one"}.

**14. As per dependent claim 7, SQUILLANTE teaches:**

The system of claim 1, the predictive analysis is based at least in part on content contained in the at least one web page {See SQUILLANTE, [0047], wherein this reads over "it is determined whether the Web page is fully stochastic (denoted FX) or quasi-deterministic (denoted QD). Then, in either step 204 or step 205, the appropriate computation for  $A_i$  is accomplished. These steps differ depending on the type of Web page"}.

**15. As per dependent claim 8, SQUILLANTE teaches:**

The system of claim 1, further comprising a bundling component that rearranges crawled web pages into new subsets according to the utility of the of the web pages {See SQUILLANTE, [0082], wherein this reads over "best schedule the crawls over a scheduling interval of length  $T$ "<sup>1</sup>}.  
<sup>1</sup>

**16. As per dependent claim 9, SQUILLANTE teaches:**

The system of claim 1, the web-crawling component comprises a Round Robin crawling component that sequentially crawls web pages in a subset and ensures that every web page will be crawled within a crawling period {See SQUILLANTE, [0029], wherein this reads over "[a] crawler optimizer determines an optimal number of crawls for each Web page over a fixed period of time called a scheduling interval, as well as determining the theoretically optimal (ideal) crawl times themselves"}, and a (Greedy crawling component that non-sequentially crawls pages according to a score associated with each page {See SQUILLANTE, [0057]-[0073], wherein this reads over "Purely Stochastic Case", "Quasi-Deterministic Case" and "a typical staleness probability function"}.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

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<sup>1</sup> The Examiner notes that the crawled web pages may be arranged into subsets wherein the subsets correspond to the time interval at which the web pages are next crawled.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chase can be reached on (571) 272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Kim  
Patent Examiner, Art Unit 2161  
TECH Center 2100



**SAM RIMELL**  
**PRIMARY EXAMINER**